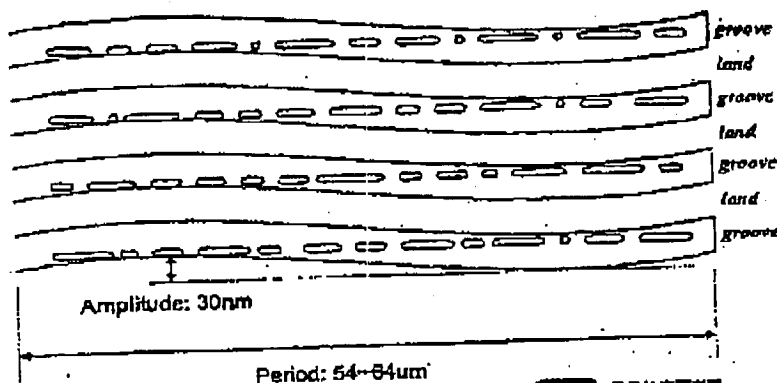


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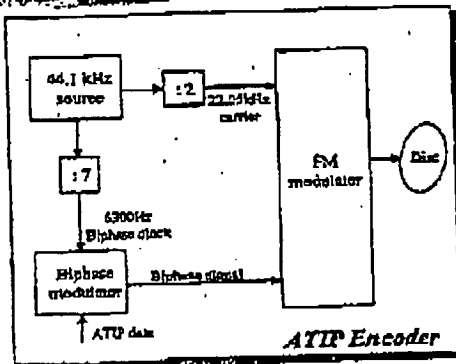
Pre-groove and Wobble



ATIP Encoder
ATIP Encoder

ATIP Modulation

Disc	Radial Track Wobble
Carrier frequency	22.05kHz
Analog modulation	FM
Digital modulation	Biphase-Mark
Synchronisation	Biphase + isolation
Data bitrate	3150 kbit/sec
Frame length	6768
Frame frequency	73Hz
Data content	3 Bytes (MIN, SEC, FRAME)
Error protection	14 bit CRC
Carrier frequency	22.05kHz
Deviation	1kHz ± 10%
Oscillator output	5 mV
Oscillator TMD	± 40 dB



ATIP Encoder
ATIP Encoder

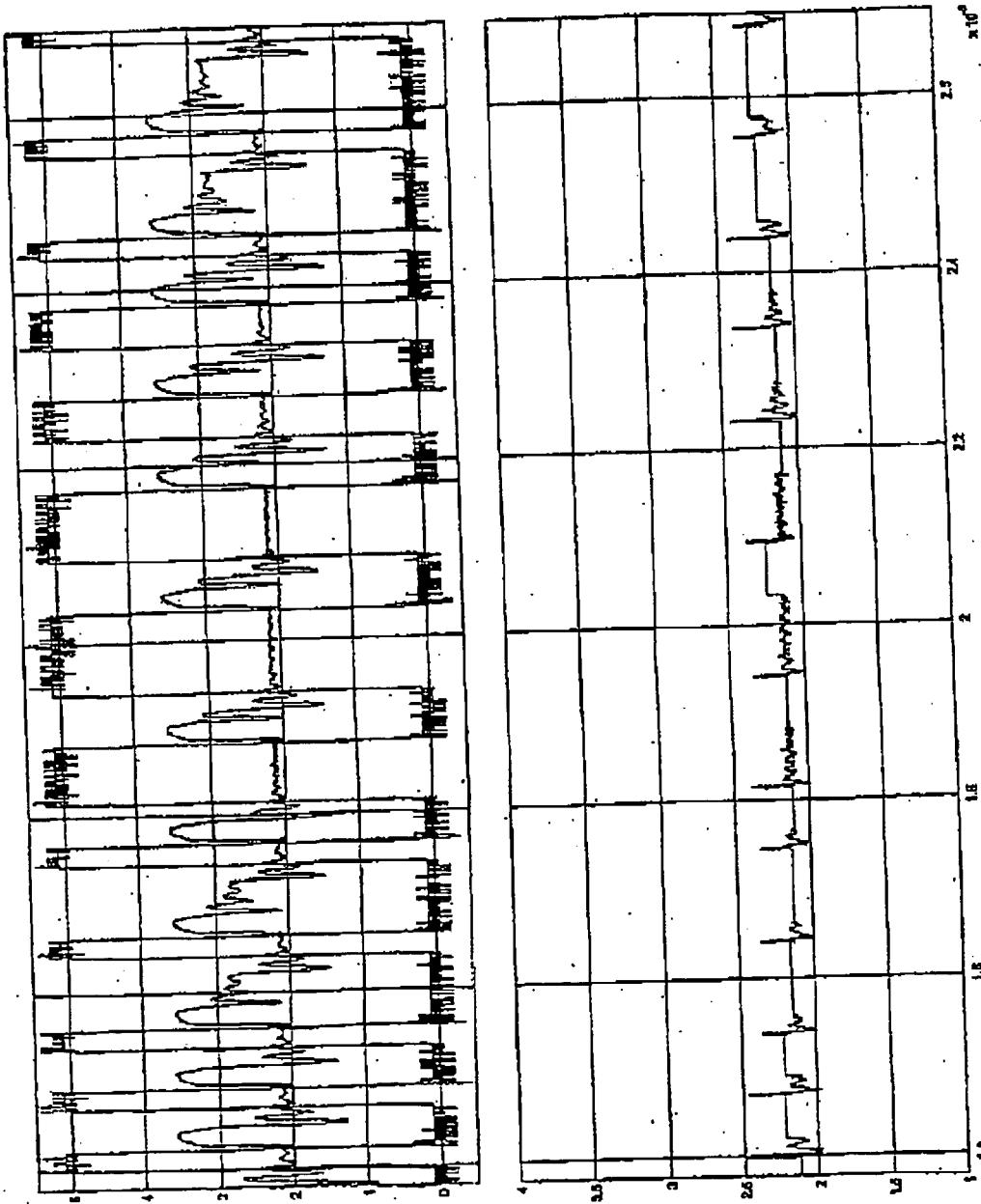
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